Author Index of Volume 195

Abbaschian, R., 101 Abdali, U., 263 Argon, A.S., 251

Brady, A., 263 Brandon, D., 189 Breslin, M.C., 113 Brimhall, J.L., 65 Brush, L.N., 65

Chan, H., 189 Chan, H.M., 163 Chang, Y.A., 29 Chaudhary, T., 223 Chaudhry, T.M., 237 Chen, D., 189 Chen, L.Q., 179 Chiang, Y.M., 131 Chisaki, J., 151 Clarke, D.R., 207 Costa e Silva, A., 75

Daehn, G.S., 113 De Silva Bassani, M.H., 1 Dieckmann, R., 39, 51 Doty, H., 101 Drzal, L.T., 223, 237

Edelstein, A.S., 1, 13 Evans, A.G., 145 Everett, R.K., 1, 13

Fang, J., 163 Foecke, T.J., 89 Foley, J.C., 13 Fraser, H.L., 113 Freitag, D.W., 197 Fuller, M., 113

Giannelis, E.P., 151

Halloran, J., 263 Handwerker, C.A., 89 Harmer, M.P., 163 Harris, M., 223, 237 Henager, Jr., C.H., 65 Hilmas, G., 263 Ho, H., 237 Horn, D.S., 169 Hou, Q., 121 Housley, R.M., 215 Hozer, L., 131

Jiggetts, R.D., 89 Johnson, D.C., 21

Kao, C.R., 29 Kattner, U.R., 89 Kaufman, M.J., 75 Kevan, S., 21 Kim, S., 29 Koczak, M., 121

Laine, R.M., 223, 237 Lange, F.F., 145 Lee, J.R., 131 Lev, L.C., 251

Marshall, D.B., 215 Messing, G.L., 169, 179 Morgan, P.E.D., 215 Mutharasan, R., 121 Novet, T., 21

Otani, T., 113

Park, J.S., 1 Perepezko, J.H., 1, 13

Qadri, S.B., 13

Ret, P., 39 Richardson, G.r., 13 Ringnalda, J., 113 Rodeghiero, E.D., 151

Sass, S.L., 39, 51 Seeger, J., 113 Subramanian, R., 39, 51

Tandon, R., 207 Tse, O.K., 151 Tu, W.C., 145

Ustundag, E., 39, 51

Wallace, J.S., 89 Woodford, J., 29

Xu, L., 113

Yang, W., 179

Zhang, M.X., 29 Zywicki, G., 263

Subject Index of Volume 195

Alloys

feasibility of aluminum nitride formation in aluminium alloys,

Alumina

anisotropic grain growth in TiO2-doped alumina, 169

Aluminium

control of texture in monolithic alumina, 189

feasibility of aluminum nitride formation in aluminium alloys, 121

formation of alumina-chromia-chromium composites by a partial reduction reaction, 89

high temperature stability of monazite-alumina composites,

in situ metal-ceramic microstructures by partial reduction reactions in the Ni-Al-O system and the role of ZrO₂, 39

in-situ processed Si₃N₄ whiskers in the system BAS-Si₃N₄, 197

processing, microstructure, and properties of co-continuous alumina-aluminum composites, 113

reacton kinetics and biasing in Al/Ni multilayers, 13

reactive hot compaction of NiAl with in-situ alumina reinforcement, 101

residual stress relaxation behavior in Al₂O₃-SiC nanocomposite, 163

Aluminum

synthesis and properties of $Ni-\alpha-Al_2O_3$ composites via sol-gel, 151

Anisotropic

anisotropic grain growth in TiO2-doped alumina, 169

Anisotropy

computer simulation of anisotropic grain growth, 179

Barium

in-situ processed Si_3N_4 whiskers in the system BAS- Si_3N_4 , 197

Carbon

reaction-infiltrated, net-shape SiC composites, 131

residual stress relaxation behavior in Al₂O₃-SiC nanocomposite, 163

silicon oxycarbide coatings on graphite fibers. II. Adhesion, processing, and interfacial properties, 237

Carbon fiber passivation

silicon oxycarbide coatings on graphite fibres: chemistry, processing, and oxidation resistance, 223

Ceramics

factors affecting the fracture resistance of silicon nitride ceramics, 207

fibrous monoliths: non-brittle freture from powder processed ceramics, 263

in situ metal-ceramic microstructures by partial reduction reactions in the Ni-Al-O system and the role of ZrO₂, 39

metal-ceramic microstructure control in partial reduction reactions in the model system Fe-Mn-O by doping, 51

processing of damage tolerant, oxidation resistant CMC's by a precursor infiltration and pyrolysis method, 145

Chromium

formation of alumina-chromia-chromium composites by a partial reduction reaction, 89

Composites

diffusional reactions in composite synthesis, 1

formation of alumina-chromia-chromium composites by a partial reducton reaction, 89

high temperature stability of monazite-alumina composites, 215

oxide-fiber-oxide-matrix composites, 251

processing of damage tolerant, oxidation resistant CMC's by a precursor infiltration and pyrolysis method, 145

processing, microstructure, and properties of co-continuous alumina-aluminum composites, 113

reaction-infiltrated, net-shape SiC composites, 131

residual stress relaxation behavior in Al₂O₃-SiC nanocomposite, 163

synthesis and properties of Ni-α-Al₂O₃ composites via sol-gel, 151

synthesis of in-situ composites through solid-state reactions: thermodynamic mass-balance, and kinetic considerations, 29

tailoring structure and properties of composites synthesized in situ using displacement reactions, 65

Computer simulation

computer simulation of anisotropic grain growth, 179

Diffraction

low angle X-ray diffraction as a probe of reactions at buried interfaces and as characterization technique for thin films, 21

Diffusion

diffusional reactions in composite synthesis, 1

Displacement

tailoring structure and properties of composites synthesized in situ using displacement reactions, 65

Doping

anisotropic grain growth in TiO₂-doped alumina, 169 metal-ceramic microstructure control in partial reduction reactions in the model system Fe-Mn-O by doping, 51

Fibres

fibrous monoliths: non-brittle fracture from powder processed ceramics, 263

oxide-fiber-oxide-matrix composites, 251

Fracture

factors affecting the fracture resistance of silicon nitride ceramics, 207

fibrous monoliths: non-brittle fracture from powder processed ceramics, 263

Grain growth

anisotropic grain growth in TiO₂-doped alumina, 169 computer simulation of anisotropic grain growth, 179

Graphite

silicon oxycarbide coatings on graphite fibers. II. Adhesion, processing, and interfacial properties, 237

Hot compaction

reactive hot compaction of NiAl with in-situ alumina reinforcement, 101

Infiltration

processing of damage tolerant, oxidation resistant CMC's by a precursor infiltration and pyrolysis method, 145 reaction-infiltrated, net-shape SiC composites, 131

Interfaces

diffusional reactions in composite synthesis, 1

low angle X-ray diffraction as a probe of reactions at buried interfaces and as characterization technique for thin films, 21

silicon oxycarbide coatings on graphite fibers. II. Adhesion, processing, and interfacial properties, 237

Iron

metal-ceramic microstructure control in partial reduction reactions in the model system Fe-Mn-O by doping, 51

Kinetics

synthesis of in-situ composites through solid-state reactions: thermodynamic mass-balance, and kinetic considerations, 29

Manganese

metal-ceramic microstructure control in partial reduction reactions in the model system Fe-Mn-O by doping, 51

Metals

in situ metal-ceramic microstructures by partial reduction reactions in the Ni-Al-O system and the role of ZrO₂, 39 metal-ceramic microstructure control in partial reduction reactions in the model system Fe-Mn-O by doping, 51

Molybdenum

applications of in-situ reactions to MoSi₂-based materials, 75 Monazite

high temperature stability of monazite-alumina composites, 215

Monoliths

fibrous monoliths: non-brittle fracture from powder processed ceramics, 263

Multilayers

reaction kinetics and biasing in Al/Ni multilayers, 13

Nickel

in situ metal-ceramic microstructures by partial reduction reactions in the Ni-Al-O system and the role of ZrO₂, 39 reaction kinetics and biasing in Al/Ni multilayers, 13

reactive hot compaction of NiAl with in-situ alumina reinforcement, 101

synthesis and propeties of $N-\alpha$ -Al₂O₃ composites via sol-gel, 151

Nitrogen

factors affecting the fracture resistance of silicon nitride ceramics, 207

feasibility of aluminum nitride formation in aluminium alloys,

in-situ processed Si₃N₄ whiskers in the system BAS-Si₃N₄, 197

Oxidation resistance

silicon oxycarbide coatings on graphite fibres: chemistry, processing, and oxidation resistance, 223

Oxides

oxide-fiber-oxide-matrix composites, 251

Oxygen

control of texture in monolithic alumina, 189

formation of alumina-chromia-chromium composites by a partial reduction reaction, 89

high temperature stability of monazite-alumina composites, 215

in situ metal-ceramic microstructures by partial reduction reactions in the Ni-Al-O system and the role of ZrO₂, 39

metal-ceramic microstructure control in partial reduction reactions in the model system Fe-Mn-O by doping, 51

processing, microstructure, and properties of co-continuous alumina-aluminum composites, 113

residual stress relaxation behavior in Al₂O₃-SiC nanocomposite, 163

silicon oxycarbide coatings on graphite fibers. II. Adhesion, processing, and interfacial properties, 237

synthesis and properties of Ni-α-Al₂O₃ composites via sol-gel, 151

Partial reduction

formation of alumina-chromia-chromium composites by a partial reduction reaction, 89

Powders

fibrous monoliths: non-brittle fracture from powder processed ceramics, 263

Pyrolysis

processing of damage tolerant, oxidation resistant CMC's by a precursor infiltration and pyrolysis method, 145

Reaction

synthesis of in-situ composites through solid-state reactions: thermodynamic mass-balance, and kinetic considerations, 29

Reaction kinetics

reaction kinetics and biasing in Al/Ni multilayers, 13

Silicon

applications of in-situ reactions to MoSi₂-based materials, 75 factors affecting the fracture resistance of silicon nitride ceramics, 207

in-situ processed Si₃N₄ whiskers in the system BAS-Si₃N₄, 197

reaction-infiltrated, net-shape SiC composites, 131

residual stress relaxation behavior in Al₂O₃-SiC nanocomposite, 163

silicon oxycarbide coatings on graphite fibers. II. Adhesion, processing, and interfacial properties, 237

Silicon oxycarbide

silicon oxycarbide coatings on graphite fibers: chemistry, processing, and oxidation resistance, 223

Sol-gel techniques

synthesis and properties of Ni-α-Al₂O₃ composites via sol-gel, 151

Solid state

synthesis of in-situ composites through solid-state reactions: thermodynamic mass-balance, and kinetic considerations, 29

Stress

residual stress relaxation behavior in Al₂O₃-SiC nanocomposite, 163

Tailoring structure

tailoring structure and properties of composites synthesized in situ using displacement reactions, 65

Texture

control of texture in monolithic alumina, 189

Thin coatings

silicon oxycarbide coatings on graphite fibres: chemistry, processing, and oxidation resistance, 223

Thin films

low angle X-ray diffraction as a probe of reactions at buried interfaces and as characterization technique for thin films, 21

Whiskers

in-situ processed Si₃N₄ whiskers in the system BAS-Si₃N₄, 197

X-ray

low angle X-ray diffraction as a probe of reactions at buried interfaces and as characterization technique for thin films, 21

Zirconium

in situ metal-ceramic microstructures by partial reduction reactions in the Ni-Al-O system and the role of ZrO₂, 39

